

### **REMARKS**

Claims 1-8 are pending in the above-identified application.

In the Office Action of January 21, 2009, claims 1-8 were rejected. Claim 2 was also objected to due to a minor informality.

With this Amendment, claims 1, 2, 6 and 7 were amended and claim 5 was canceled. Accordingly, claims 1-4 and 6-8 remain at issue.

#### **I. Objection To Information Disclosure Statement**

The Examiner objected to the information disclosure statement (“IDS”) filed 22 October 2008 as failing to comply with 37 CFR 1.98(a)(3) because a translation of the Japanese Office Action listed in the IDS or an explanation of its relevance was not provided. Applicants respectfully traverse this objection.

Applicants submit that the Japanese Office Action dated 26 August 2008 and listed in the IDS was issued in connection with Japanese Application No. 2004-553223. The foreign patents identified in this Japanese Office Action were identified in the IDS and a corresponding translation of each foreign patent was provided in compliance with 37 CFR 1.98(a)(3). However, the Japanese Office Action itself is not a foreign prior art reference that is required to be provided with a translation.

Moreover, 37 CFR 1.98(a)(3)(i) provides that “A copy of the translation [is to be included with the IDS] if a written English-language translation of a non-English-language document...is within the possession, custody, or control of, or is readily available to” the Applicants.

At the time the IDS was submitted, Applicants did not possess or have access to a translation of the Japanese Office Action. However, for the Examiner's convenience, Applicants had a translation of the Japanese Office Action created. A copy of the translation document is concurrently submitted with this Response.

Accordingly, Applicants respectfully request that this objection to the IDS be withdrawn.

## **II. Objection To Claims 2**

The Examiner objected to claim 2 due to a typographical error.

Applicants have amended claim 2 to correct the minor informality noted by the Examiner. Accordingly, Applicants respectfully request that this objection to this claim be withdrawn.

## **III. 35 U.S.C. § 102 Anticipation Rejection of Claims And 35 U.S.C. § 103 Obviousness Rejection of Claims**

Claims 1, 3, 4 and 7 (of which 1 and 7 are independent) are rejected under 35 U.S.C. § 102(b) as being purportedly anticipated by *Levich* (PCT Publication WP 02/49009 A2). Claims 2 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Levich* in view of *Nakagawa* (Japanese Patent Publication 55-017152). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Levich* in view of *Aki* (European Patent Publication 0772189).

Although Applicants do not agree with the Examiner's rejections, to further prosecution, Applicant has amended independent claims 1 and 7 to incorporate the limitations of dependent claim 5. Applicants reserve the right to pursue the original or previously presented claims in a divisional application.

With respect to independent claims 1 and 7 as amended, Applicants claim a method of making a master for manufacturing an optical disc that requires, in relevant part:

*“...in said exposing step, a laser beam for estimation is applied to a predetermined area on said inorganic resist layer to estimate information signal characteristics of said exposed pattern of said inorganic resist layer using reflected light of the laser beam for estimation, and power of said laser beam for recording is controlled based on the estimated result.” and*

*“wherein said laser beam for estimation is applied to an unexposed area and an exposed area corresponding to where said laser beam for recording formed a portion of the pattern corresponding to said information concave and convex pattern of said optical disc, and the information signal characteristics of said exposed pattern of said inorganic resist layer are estimated to derive the estimated result using a ratio between reflected light amount from said unexposed area and reflected light amount from said exposed area, with said laser beam for estimation.”*

The Examiner acknowledged that *Levich* fails to teach or suggest the limitations of method claim 5. In particular, the Examiner acknowledged that that *Levich* “does not teach that [*Levich*’s] test laser is used to obtain information from an exposed and unexposed area of the master, or that the power of the write laser is controlled so that the ratio between the amounts of reflected light is kept constant.” (See, 21 January 2009 Office Action, pg. 5.) The Examiner points to the abstract and column 6 lines 22-34 of *Aki* for support that *Aki* teaches these limitations missing from *Levich*. *Id.*

Applicants respectfully disagree with the Examiner’s assertion that *Aki* effectively teaches the limitations of claim 5 now incorporated into independent claims 1 and 7. *Aki* teaches an optical disk master exposure apparatus 1 that has a first laser light source 7 for emitting a light beam (i.e., exposure light beam  $L_{B2}$ ) to expose a resist layer of a master disk 12 and a second laser light source 2 for emitting a light beam (i.e., testing light beam  $L_{A3}$ ) that has a wavelength that is not sensed by the resist layer but used to test the predetermined surface area

that is exposed by the exposure laser light  $L_{B2}$ . (See, *Aki*, Col. 4 line 17 - Col. 5 line 17; Fig. 1). *Aki* teaches creating a combined light beam  $L_{AB}$  from the exposure light beam  $L_{B2}$  and testing light beam  $L_{A3}$  that is used to simultaneously expose the predetermined surface area with the exposure laser light  $L_{B2}$  and test the same exposed area from the testing light beam  $L_{A3}$  reflected from the same exposed area (i.e., reflected testing light beam  $L_{A7}$ ). (See, *Aki*, Col. 5 lines 10-17; Fig. 1). However, no where does *Aki* teach or fairly suggest that its and testing light beam  $L_{A3}$  is applied to an unexposed area and an exposed area of the resist layer of the master disk 12.

Furthermore, *Aki* teaches that the reflected testing light beam  $L_{A7}$  is received by a position detector 15 that drives a “+” input of a calculation circuit 18 with an “applied voltage” based on the reflected testing light beam  $L_{A7}$ . The calculation circuit 18 sums this “applied voltage” (i.e., the reflected testing light beam  $L_{A7}$  with a reference voltage to generate a sum signal S2 that drives a light amount control circuit 20 that in turn controls the second laser light source 2 based on the sum signal S2, “so as to maintain a constant amount of reflected light [from the exposed area of] the glass master 12” disk. (See, *Aki*, Col. 5 line 45 - Col. 6 line 34; Fig. 1).

Applicants submit that *Aki*'s teaching of controlling the second laser light source 2 so as to maintain a constant amount of reflected light from the exposed area of the glass master 12 disk does not correspond to “a ratio between reflected light amount from said unexposed area and reflected light amount from said exposed area” (as required by claims 1 and 7 as amended) that is used to control the exposure light beam laser 1 or a laser for recording on the resist layer of the master disk.

Moreover, *Aki* fails to teach using reflected light from the exposed area of the master disk 12 (or reflected light from an unexposed area or a ratio thereof) to control the exposure light beam laser 1.

Applicants submit that *Nakagawa* also fails to disclose or fairly suggest an exposing, recording, or write laser that is used to obtain information from an exposed and unexposed area of the master disk, or that the power of such a laser is controlled based on the ratio between the amounts of reflected light from the exposed and unexposed areas.

Thus, Applicants submit that *Levich*, *Nakagawa*, and *Aki* (taken singly or in combination) fail to teach or fairly suggest each of the limitations of independent claims 1 and 7 as amended. Accordingly, Applicants respectfully request that the rejection of claims 1 and 7 be withdrawn.

As previously noted, claim 5 has been cancelled and its limitations incorporated into independent claims 1 and 7.

Claims 2-4 and 6 depend from claim 1 and claim 8 depends from claim 7. Thus, these dependent claims should be deemed allowable for at least the same reasons as given for claims 1 and 7.

#### **IV. Conclusion**

In view of the above amendments and remarks, Applicant submits that all pending claims 1-4 and 6-8 are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

The Commissioner is hereby authorized to charge any additional fees which may be required, to Account No. 19-3140.

Respectfully submitted,

Dated: May 19, 2009

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S03P1338US00

## Office Action

Application Number: 2004-553223

Japanese office action Issued date: August 26, 2008

This application is the one that it is necessary to reject it by the following reason. Please submit the opinion in writing within 60 days from the day of sending out this notification.

1. The invention that lies claim 1 and 3 to 7 of this application lacks of novelty. As for the invention that lies claim 1 and 4 to 7, refer to the lower right-hand section of page 1, the upper left-hand section of page 4 and chart 1 of quotation document 1.

2. The invention that lies claim 1 and 3 to 7 of this application lacks of inventive step. Refer to reason 1 for the invention that lies claim 1 and 4 to 7. In addition for the invention that lies claim 3, refer to 0015 and Figure 2 of quotation document 2, claim 5 and 0017 of quotation document 3, and 0032 and 0033 of quotation document 4. It is a conventional art to assume the irradiated region of the laser light for the evaluation to be areas other than the irradiated region of the laser light for the record.

3. This application doesn't meet the requirement for which the description of the claim provides to Article 36 in the following point of the patent law.

The invention that lies claims 2 and 8 is a Manufacture method of master for optical disk manufacturing that is resist layer where the inorganic resist layer contained incomplete oxide of transition metal, but, only a specific inorganic resist layer (The ratio of W and Mo is 80:20, and the content of oxygen is 60atom%) that consists of an imperfect oxide of W and Mo as a concrete example of the inorganic resist layer is shown in detailed description of the invention. So, it is not possible to be enhanced or generalized to the range of the invention that lies claims 2 and 8 from the content disclosed in detailed description of the invention. Moreover, those skilled in the art cannot execute the inventions other than a specific concrete example described in the embodiment.

## Notice of references cited

1. Japanese publication No. 60-254432
2. Japanese publication No. 8-329534
3. Japanese publication No. 4-356744
4. Japanese publication No. 9-152716